

ATFS F350 4x4
WILDLAND FIRE APPARATUS
ENHANCED PROPOSAL

Ultra-High Pressure Wildland Initial Attack Platform



Executive Summary

The ATFS F350 4x4 Wildland Fire Apparatus has been designed as a highly capable rapid-response wildfire suppression platform integrating conventional low-pressure firefighting with advanced Ultra-High Pressure (UHP) suppression technology. The apparatus combines exceptional off-road mobility, reduced water consumption, high maneuverability, and aggressive initial attack capability into a compact and highly versatile package.

Designed for wildland, rural, industrial, military, and Wildland Urban Interface (WUI) applications, the apparatus provides pump-and-roll capability, rapid deployment, extended operational endurance, and enhanced firefighter safety.



Mission Profile

- Wildland initial attack operations
- Grass and brush fire response
- Pump-and-roll firefighting
- Wildland Urban Interface (WUI) protection
- Rural and municipal fire department deployment
- Industrial and airport rapid-response applications
- Vehicle, equipment, and limited structural firefighting



Ultra-High Pressure Tactical Advantages

- Rapid gas cooling capability for aggressive transitional attack
- Significantly reduced water consumption
- Extended operational duration in remote environments
- Improved penetration into deep-seated fuels
- Enhanced mobility during mobile attack operations
- Reduced collateral water damage
- Improved firefighter survivability and thermal environment control
- Versatility across wildland, vehicle, industrial, and limited structural incidents

Standards and Compliance

The apparatus shall be constructed in accordance with applicable sections of NFPA 1901 current edition where applicable to Type 3 and Type 6 wildland apparatus design and shall comply with applicable Federal DOT and SAE standards.



Detailed Technical Specifications

SPECIFICATIONS FOR

F350 4x4 WILDLAND FIRE APPARATUS

CHASSIS SPECIFICATIONS

One (1) new F350 4x4 Extended cab ex

GVWR: payload upgrade, single axle rating of 19,500 pounds

Wheelbase of chassis: 159"

Cab to axle dimension: 60"

Bumper and Grille: chrome plated bumper, black grill. red

Tow Hooks: front

Driving Front Axle and Suspension: HD front package, stabilizer bar, front shocks

Transfer Case: manually controlled in cab, high and low range.

Tires: two (2) all terrain tread radial front tires sized to the axle rating severe duty 335/80/R20

Front Wheels: two (2) heavy duty front wheels 20x10 42"

Rear Axle and Suspension: DANA 130 rigid axle wide track rear axle, extra HD suspension package, stabilizer bar, limited slip differential

Tires: Two (2) all terrain super single front 335/80/R20 tires, rims painted.

Rear Wheels: Two (2) all terrain super single rear 335/80/R20 tires, rims painted.

Braking System: brake system with an Anti-Lock (ABS)

Engine: 330 HP 6.7L V-8 turbo diesel.

Engine Block Heater: 120-volt coolant heater, with exterior mounted straight blade receptacle

Cooling System: a coolant mixture protected to -30 degrees Fahrenheit.

Exhaust System: horizontally mounted, discharge on right side aft of wheels

Fuel Tank: 40-gallon rear mounted, left side filler extension

Transmission: 10 speed Torqshift - speed automatic

Steering: power steering system

Batteries: Dual (2) 78-AH750CCA heavy-duty 12-volt batteries

Alternator: 332 Amp

Cab Construction.: Extended 4 door cab

Mirrors: manually extended trailer type (2), heated

Cab Paint: Primary color of truck will be white with red reflective stripe. Paint finish and color will be to the satisfaction of the Chief Fire Officer.

Climate Controls: Manual air conditioning with air filter

Window and Door Controls: electric window and door lock controls

Cab Instruments: standard type, cruise control, (4) upfitter switches, auxiliary power plug

Drivers and Passenger Seat: HD vinyl 40/20/40 style seats with three (3) point safety harness, power type driver's seat.

Crew Seats: Extended cab seating for 5 crew

Printed Manuals: one (1) printed chassis operation manual.

Cab Accessories: AM/FM radio, two radio speakers and antenna

CAB SEATING AND WEIGHT ALLOWANCE

A warning label shall be installed in the cab to indicate seating positions for Four (4) people. A weight allowance of 250 pounds shall be calculated for each person.

DATA PLAQUE

A data plaque shall be provided and installed on the inside of driver's door. The data plaque shall contain the required information based on the applicable components for the apparatus, applicable to the applicable NFPA standards:

Engine oil

Engine coolant

Chassis transmission fluid

Drive axle lubricant.

Power steering fluid

Pump, generator, or other component lubrications

Other NFPA applicable fluid levels or data as required.

Paint manufacturer, type, and color number

Location shall be in the driver's compartment or on driver's door.

DIMENSION DATA LABEL

The cab dash area shall have an apparatus dimension label installed. The label shall be highly visible, indicating the overall height, length, width, and weight of the vehicle.

WARNING LABEL -- NO RIDING ON REAR

A warning label stating: "NO RIDING ON REAR OF APPARATUS" shall be installed on rear of the apparatus. The label shall be applied to the vehicle at the rear step area. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion, is prohibited.

WARNING LABEL -- SEAT BELT USAGE

A warning label, stating: "DANGER- Personnel Must Be Seated and Seat Belts Must Be Fastened While Vehicle Is in Motion or DEATH OR SERIOUS INJURY MAY RESULT" shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

WARNING LABEL – HELMET USE IN CAB

A label stating: "DO NOT WEAR HELMET WHILE SEATED" shall be visible from each seating location.

VEHICLE FINAL STAGE MANUFACTURER LABEL

A final stage manufacturer label shall be installed by the fire apparatus body manufacturer in compliance to applicable motor vehicle standards.

REQUIRED LABELS

Type of Fuel Label: A "Diesel Fuel Only" label shall be attached to fuel fill access door.

Additional Labels: All labels, signs, name plates and instruction plates shall be permanent in nature with the information permanently engraved, stamped, or etched thereon. Labels, signs, and name plates to be installed with plated screws. All labels are to be mounted in a conspicuous place.

TEST DATA AND SAFETY PLACARDS

The pump panel shall be provided with labels required by applicable sections of NFPA. The labels shall be provided with all information at the factory and be attached to the apparatus prior to delivery.

REAR TOW PLATES

Two (2) painted bolt-on tow plates shall be installed at the rear of the chassis.

EXHAUST EXTENDED AND HEAT SHIELD

The exhaust pipe shall be extended to the side of the vehicle, aimed directly outward horizontally. The underside of the apparatus shall be provided with a heat shield. The heat shield shall be installed under the body in the areas where the exhaust system is routed.

FRONT MUD FLAPS

The chassis shall be supplied with black mud flaps behind the front wheels and installed by the chassis manufacturer.

REAR MUD FLAPS

Black mud flaps shall be installed behind the rear wheels.

CAB STEPS

The cab shall be equipped with painted black steel tubing step assemblies, on each side of the cab.

CAB DOOR REFLECTIVE PANELS

The cab doors shall have reflective panels installed.

TIRE PRESSURE LABELS

The front and rear tire pressure shall be installed over each tire on the cab and body panels, indicating the recommended tire pressures for the vehicle in the loaded condition.

TIRE AIR PRESSURE INDICATING SYSTEM

All tires and wheels shall be equipped with a tire air pressure indicating system with a monitoring device at wheel areas and installed in compliance with applicable NFPA standards. The final stage manufacturer shall install a label at each fender area to denote the in-service air pressure (this label pressure could be variable with the future unknown loading of vehicle.)

BODY AND COMPARTMENT SPECIFICATIONS

BODY DESIGN AND CONSTRUCTION SPECIFICATIONS

The apparatus body shall be all aluminum construction. The body shall have Eight (8) exterior compartments. After fabrication in a body fixture, the unit shall be mounted on the specified chassis.

The apparatus body shall be welded construction for maximum strength and integrity for the entire life of the apparatus.

Body Mounting

The body shall be mounted to the chassis frame using Grade 8 bolts, coil springs, and UHMW plastic isolators system, which shall allow for flexing of the chassis frames. This mounting method shall provide the greatest combination of strength and flexibility, allowing for maximum body life and quick removal of the apparatus body from the chassis.

The body shall then be secured to the chassis mountings with six (6) Grade 8 5/8" x 6" bolts. Six (6) 1,220 inch-lbs. steel compression springs shall be installed on these mounting bolts to allow for flexing of the body to chassis mounting.

Exterior Body and Compartment Construction

The exterior body fabrication shall be constructed of aluminum plate. The floor, and sidewalls shall be of body construction that shall be integral, which shall be self-supporting and welded construction.

Fabrication shall be off the chassis and assembled on a fixture and then installed on the chassis frame. The body fixture shall hold the body side panels in place, with exterior and interior aluminum sheets and welded to the sub-frame extrusions for extra reinforcement.

Interior Compartment Construction

Interior compartments walls, floors, and ceilings shall be constructed of smooth aluminum plate. Compartments shall be of all welded construction with continuous welding in critical structural areas and 3" strip welding on 6" centers in non-critical areas.

Compartment Floor Construction

The compartment floors shall be .125" aluminum with a "lip free" and sweep out construction, which shall permit easy cleaning of the compartments. The compartment floors shall have .125" aluminum 2" x 4" hat-sections welded on the underside of body for reinforcement.

ULTRA HIGH PRESSURE FIRE PUMP SPECIFICATIONS

Scope and General Design Requirements

A firefighting system shall be provided for offensively attacking a fire. The Dual Pump module will consist of a fully integrated Ultra-High/Low pressure pump module driven of a single power source.

The pump module will be designed as a plug and play "drop-in" module.

Components and Base Plate Design

The fire-fighting system shall consist of:

Water pump: General HTCK 2336S 20GPM High pressure positive displacement piston pump.

Water pump: Darley 2 ½ AGH 250 GPM Centrifugal low pressure.

1 x Hose Reel: Ultra-high pressure hose reel and attack hose

Nozzle: Manually operated ultra-high pressure pistol grip style fog nozzle.

Discharge manifold with 2 x 1 ½" NST discharge ports controlled via ¼ turn ball valves.

1" Recirculation Line back to tank.

High performance electric primer system. (Optional)

Trident Foamate UHP Foam system 0.5 – 6%. (Optional)

Trident Foamate 1.0 Foam system 1%. (Optional)

2 x ½" UHP whip-line discharges. (Optional)

Both pump systems shall form part of a single pump module and be integrated to work via a single hydraulic power source.

2 ½" Suction inlet.

20' x 2 ½" Drafting hose. (Optional)

The major components shall be assembled on a removable assembly with integral hydraulic motor. The entire system shall be designed to be a quickly installed or removable "plug-and-play" module.

Safety and Standards Compliance

The system shall be designed for the safety of the operator and fire fighter in mind with a safety margin of 4:1 built into all components.

Performance Capabilities

The firefighting system has been tested and proven to be highly effective in the following scenarios:

Wildland, grass, and brush fire applications

Automobile and truck fires

Limited structural fires

Confined or concealed space fires

Limited industrial fires

Shipboard and marine firefighting

Military firefighting applications

Container fires

PLUMBING

The fire-fighting system shall be plumbed with high pressure hydraulic type hose, plumbing and fittings. This shall include double wire braided high pressure hoses of various sizes, zinc plated steel hose ends, and plated steel hydraulic fittings. The threads shall be male and female NPT, JIC and SAE O-ring style in various sizes. Rigid plumbing shall be in zinc plated steel piping with pipe fittings of zinc plated steel.

BYPASS UNLOADER VALVES

The ultra-high pressure plumbing system shall include one (1) bronze adjustable by-pass unloading valve set for the proper working pressure of the system. The valve shall unload the excess pressure to the intake side of the pump.

PUMP SAFETY VALVE

The ultra-high pressure plumbing system shall include a UDOR 1" pump safety valve which shall relief full fire pump capacity to atmosphere: in case of blockage.

FIRE PUMP AND OPERATIONAL CONTROL PANEL

The control panel shall be ergonomically designed and operator friendly. The panel shall be labeled and installed to be easily visible from the operator's position. The following instruments, switches, control panel and enclosure shall be installed as follows:

Master electrical and emergency stop switch (red)

UHP fire pump water pressure gauge

One (1) LED light with on/off switch control

Automatic engine RPM control system.

An UHP fire pump high water temperature sensor shall activate a warning light and a warning signal on the pump panel.

Foam master on/off switch shall be provided on the control panel.

ELECTRIC REWIND HOSE REEL – ULTRA-HIGH PRESSURE

One (1) ultra-high pressure steel hose reel shall be installed with a maximum capacity of 200' of 3/4" hose per reel. The reels shall have a leak proof ball bearing swing joint, electric rewind provisions. The reel system shall be designed for a 2,000 PSI (135 bar) working pressure. The reels shall be painted red.

The hose reel shall be equipped with an electrical wiring junction box of plastic construction with

a sealed cover assembly. The box shall house the reel 12V solenoid, circuit breaker, and electrical wiring for the rewind control circuit and electric rewind motor power supply. The electrical supply shall be sized for the reel motor for both positive and neutral cables. The electrical supply wiring shall be supplied from the main electrical supply box for high pressure pump skid or module.

One (1) stainless steel hose roller assembly shall be supplied with reel for protection of the hose during hose removal and rewind operations.

ELKHART NOZZLE -- ULTRA-HIGH PRESSURE

One (1) ELKHART 20 GPM (80 LPM) ultra-high pressure pistol grip fog nozzle shall be provided for the high-pressure fog reel.

WHEEL WELL PANEL CONSTRUCTION

Wheel well panels shall be painted .125" aluminum and bolted in place. All seams on the frame side of the body shall be welded and caulked to prevent moisture from entering the compartment. The rear wheel wells shall be radius cut for a streamlined appearance.

WHEEL WELL LINERS

Wheel well liners designed to protect the body from impact resulting from road debris thrown by the tires shall be installed. The wheel well shall be provided with ABS plastic full fender liners that shall be formed to eliminate pockets that might trap and collect road dirt.

FUEL FILL ACCESS -- LEFT SIDE

A Cast Products model #FG2103 fuel fill cover shall be installed on left side of the wheel well area. The cover shall be constructed of bead-blasted aluminum and shall be vertically hinged on the forward side. The fuel cover flange shall be constructed of polished stainless-steel.

RUB RAILS

The sides of the lower body area fore and aft of the wheel well area shall be provided with 3" x 1.5" x .250" extruded aluminum rub rails, with end caps or angle corners. The rub rails shall be equipped with red and white DOT type reflective striping.

VENTILATION LOUVERS -- EXTERIOR COMPARTMENTS

The exterior body compartments shall be equipped with 3.5" diameter louvers mounted inside of each compartment; to permit the passage of moisture or hazardous vapors into and out of compartments.

PAN TYPE DOOR CONSTRUCTION

The Pan type slam shut doors shall be fabricated from aluminum.

A drip rail designed to prevent water from dripping into the compartment shall be provided. The drip rail shall have a built in replaceable non-contacting seal to eliminate scratching of the surface of the door.

The middle locker doors will fold downwards to form a workspace if required. The doors will be adequately supported either side by retainer systems.

Four (4) Pan type slam shut doors shall be installed.

HANDRAIL -- REAR STEP

Two (2) extruded aluminum non-slip handrails, approximately 48" in length, shall be provided and mounted on the rear of the apparatus, one (1) on each side of the body.

12 VOLT ELECTRICAL SPECIFICATIONS

The following describes the low voltage electrical system on the apparatus including all panels, electrical components, switches, and relays, wiring harnesses and other electrical components. The apparatus manufacturer shall conform to the latest Federal DOT standards, current automotive electrical system standards.

Wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops shall not exceed 10 percent in all wiring from the power source to the using device. The wiring and wiring harness and insulation shall be in conformance to applicable SAE standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. Exposed wiring shall be run in a loom with a minimum 289-degree Fahrenheit rating. Wiring looms shall be properly supported and attached to body members. Electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

All wiring connections and terminations shall provide positive mechanical and electrical connections and be installed in accordance with the device manufacturer's instructions.

When wiring passes through metal panels, electrical connections shall be with mechanical type fasteners and rubber grommets.

Wiring between cab and body shall be split using Deutsche type connectors or enclosed in a terminal junction panel allowing body removal with minimal impact on the apparatus electrical system. Connections shall be crimp-type with heat shrink tubing with insulated shanks to resist moisture and foreign debris such as grease and road grime. Weather resistant connectors shall be provided throughout the system.

Electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. When required, automatic reset breakers and relays shall be housed in the main body junction panel.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless enclosed in an electrical junction box or covered with a removable electrical panel.

Low voltage overcurrent protective devices shall be provided for the electrical circuits. The devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. Overcurrent protection devices shall be automatic reset type suitable for electrical equipment and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. Electro-magnetic interference suppression shall be provided in the system as required in applicable SAE standards.

The electrical system shall include the following:

Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. All terminal plugs located outside of the cab or body shall be treated with a corrosion preventative compound.

All electrical wiring shall be placed in a protective loom or be harnessed.

Exposed connections shall be protected by heat shrink material and sealed connectors.

Large fender washers shall be used when fastening equipment to the underside of the cab roof and all holes made in the roof shall be caulked with silicone.

Electrical components installed in exposed areas shall be mounted in a manner that will not allow moisture to accumulate inside.

A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.

All lights in a weather exposed area that have their sockets shall have corrosion preventative compound added to the socket terminal area.

Warning lights shall be switched in the chassis cab with labeled rocker type switches located in an accessible location. Individual rocker switches shall be provided only for warning lights provided exceeding the minimum level of warning lights in either the stationary or

moving modes. All electrical equipment switches shall be appropriately identified as to their function and mounted on a switch panel mounted in the cab convenient to the operator.

For easy nighttime operation, an integral indicator light shall be provided to indicate when a circuit is energized.

Surface mounted protected and enclosed conduits shall be installed in the body for routing of the 12-volt wiring. The material and installation shall conform to applicable SAE standards. Wiring shall be easily accessed through a removable cover for inspection and maintenance.

CUSTOM FABRICATED CONSOLE AND SWITCH PANEL

A custom fabricated electrical console and enclosure shall be located between the drivers.

CAB DASH ROCKER SWITCH PANEL

A switch panel with four (4) individual rocker switches to control electrical equipment and emergency lighting shall be installed in the chassis cab dash area.

BATTERY SWITCH - MASTER DISCONNECT

A battery disconnects rocker switch controlling the 12-volt power supply from the battery system shall be located conveniently to the driver. A green "Master On" light shall be provided adjacent to the chassis battery switch illuminating anytime the master switch is in the "ON" position.

BATTERY INDICATOR LIGHT

A green battery "on" light shall be located on or near the cab dash.

IDENTIFICATION LIGHTS

All LED identification lights shall be installed on the vehicle as required by applicable DOT highway regulations.

LICENSE PLATE BRACKET

A license plate bracket with LED light shall be provided at the rear of the apparatus.

TAIL, TURN, BACKUP ASSEMBLY LIGHTS

The lights shall be mounted in chrome bezel and installed at rear of the body. There shall be:

Red tail and stop lights

Amber turn signals

Back-up lights

CAB GROUND LIGHTS

Four (4) LED ground lights shall be installed under the cab step area in compliance with NFPA standards activated with parking brake.

GROUND LIGHTS - UNDER REAR STEP

Two (2) LED ground lights shall be installed under the rear step area, one on each side of the apparatus, wired to parking brake circuit.

REAR STEP LIGHTS

Two (2) LED step lights with clear lens shall be installed at the rear step of the apparatus body, wired to parking brake circuit.

COMPARTMENT LIGHTING

Four (4) compartments shall be equipped with LED strip lighting, installed on inside of compartment.

"DOOR OPEN" OR EQUIPMENT OPERATION WARNING LIGHT

A "door open" or equipment operation warning light shall be installed on cab dash. The light shall be flashing LED light with a red lens.

BACK-UP ALARM

A Preco Model #1040 automatic electric back-up alarm shall be wired to the back-up light circuit and mounted under the rear of the apparatus body.

ELECTRONIC SIREN

The heavy duty 100/200-watt, six (6) function siren shall have the following features: hands-free operation, public address, park kill, push to talk, and radio re-broadcast. The siren shall have the following tones: wail, yelp, piercer, and air horn.

The unit shall have solid-state over/under voltage shutdown and output short circuit protection. The siren shall have the "SI Test" self-diagnostic feature for silent speaker inspection. The siren shall have a face plate with green LED backlighting for easy control selection and visibility. The siren shall have a hard-wired unidirectional microphone with a 17" extendable coil cord.

SIREN SPEAKER

One (1) Series siren speaker shall be provided. The 100-watt siren speaker shall be designed in a black nylon composite housing with 123 decibel rating.

LIGHTBAR

A low-profile Super-LED lightbar shall be installed. The lightbar shall be designed to meet the minimum clearing requirements for Zone A Upper. The internal components of the lightbar shall be housed within a two-piece extruded aluminum base/top. The outer shell

shall be clear optic polycarbonate lenses designed to maximize light output and shield against environmental elements.

The lightbar shall utilize snap-in brackets to hold in the light heads. The brackets shall give the end user the ability to make quick repairs. The lightbar shall have all solid-state components. The lightbar shall have two wire harnesses exiting the unit: one (1) 17 conductor 22-gauge control cable which controls all internal light functions; and one (1) 2 conductor 10-gauge cable for main power and ground. Each cable shall be 15' long.

ZONE B AND D -- UPPER REAR WARNING LIGHTS

Two (2) 4-5/16" x 6-3/4" warning lights shall be provided in the upper body side panel. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The light heads configuration shall consist of 18 red Super-LEDs and a red optic polycarbonate lens. The light heads shall be surface mountable via two screws. The light heads shall utilize an optic collimator and a chrome vacuum metalized reflector for maximum illumination. The light heads shall include 164 flash patterns including: a variety of CA Title 13 compliant, sync able, left/right, top/bottom, in/out, and steady burn.

ZONE C -- LOWER REAR WARNING LIGHTS

Two (2) warning lights shall be provided in lower rear of body. The warning lights shall incorporate Linear Super-LED and Smart LED technology. The light heads configuration shall consist of 18 red Super-LEDs and a red optic polycarbonate lens. The light heads shall be surface mountable via two screws. The light heads shall utilize an optic collimator and a chrome vacuum metalized reflector for maximum illumination. The light heads shall include 164 flash patterns including: a variety of CA Title 13 compliant, syncable, left/right, top/bottom, in/out, and steady burn.

INTERIOR COMPARTMENT FINISH

The interior wall, floor and ceiling surfaces of the body compartments shall be unpainted aluminum. The interior of all body compartments shall be an aluminum DA finish. Care shall be taken in the manufacturing process to minimize blemishes.

WASH AND PREP OF COMPLETED VEHICLE

The apparatus cab and body shall be washed and prepared for final purchaser inspection and acceptance.

CAB AND BODY STRIPING

The cab and body shall have a straight reflective stripe applied horizontally. The stripe shall be a 4" minimum in width and be applied horizontally around the cab and body in accordance with applicable NFPA standards. The CFO shall specify the color and location of the stripe.

2.5# DRY CHEMICAL FIRE EXTINGUISHER

One (1) ABC dry chemical fire extinguisher and mounting bracket shall be provided on the apparatus. The extinguisher shall have a pressure gauge and shall be filled with a dry chemical extinguishing agent.

NUTS AND BOLTS

Various sized nuts and bolts shall be provided in a small utility storage box.



Conclusion

The ATFS F350 4x4 Wildland Fire Apparatus represents a next-generation wildfire suppression platform combining rugged off-road capability, advanced Ultra-High Pressure firefighting technology, operational flexibility, and reduced water demand into a highly deployable rapid-response apparatus.

The integrated HYLO dual-pressure pump module provides unmatched versatility for wildland and multi-mission firefighting operations while maintaining compact size, excellent serviceability, and superior tactical effectiveness.

ATFS remains committed to providing advanced suppression technologies, firefighter safety, operational readiness, and long-term customer support.

ADVANCED TACTICAL FIRE SUPPRESSION (ATFS)

Advanced Wildland and Ultra-High Pressure Firefighting Solutions